

V&V Reference Report

L2 ASCDS Version : 7.6.11.1

Observation 1452 - L2 Version 4
Chandra X-Ray Center

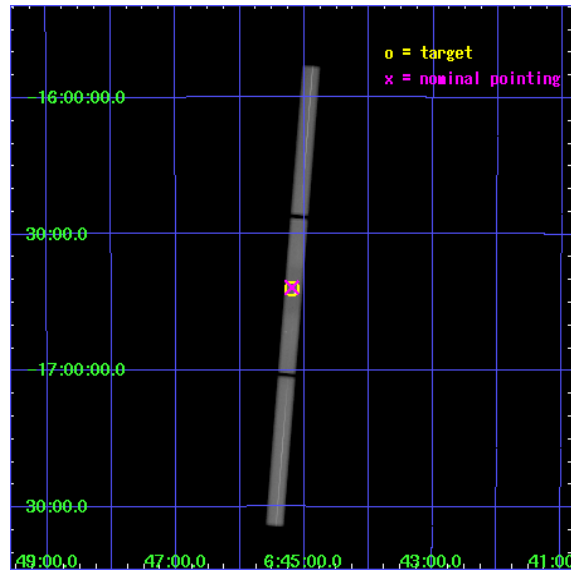
L2 Processing Date : Sep 6 2007

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1 Front

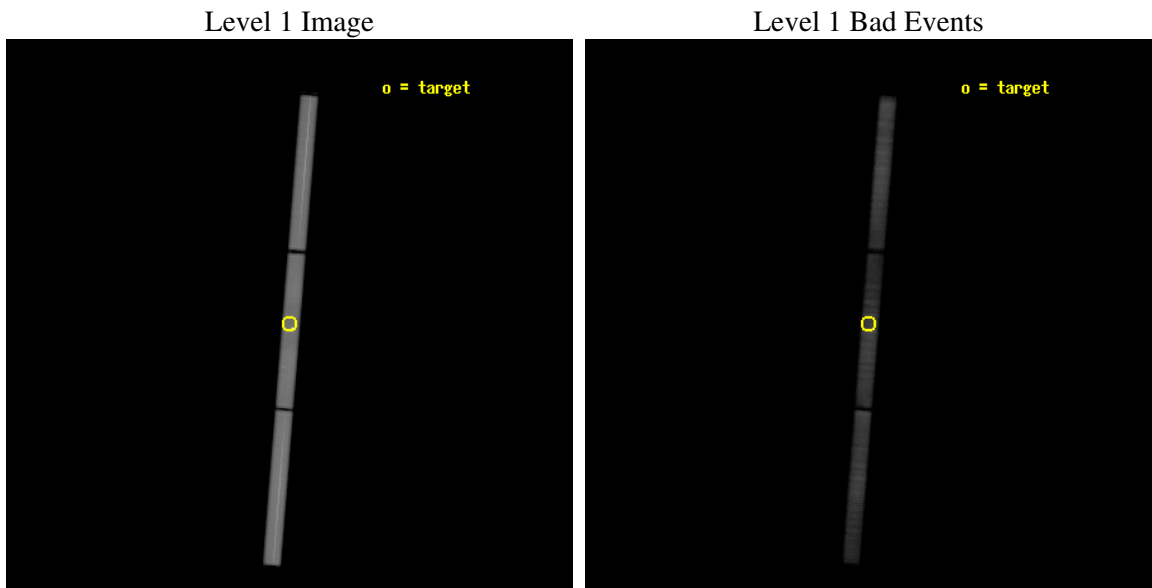
seq_num	280402
obs_id	1452
title	
observer	Dr. CXC Calibration
object	SIRIUS B
ra_targ	101.295833
dec_targ	-16.701389
ra_nom	101.298165
dec_nom	-16.696431
roll_nom	72.408889
revision	4
ontime	27955.082303151
livetime	27472.144984074
l2events	2871585



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Parameters

obi_num	1
ascdsver	7.6.11.1
caldbver	3.4.0
date	2007-09-06T20:03:43
revision	3

sched_exp_time	27972.000000
ontime	27955.082303151
l1events	3677069

2.1.3 Events

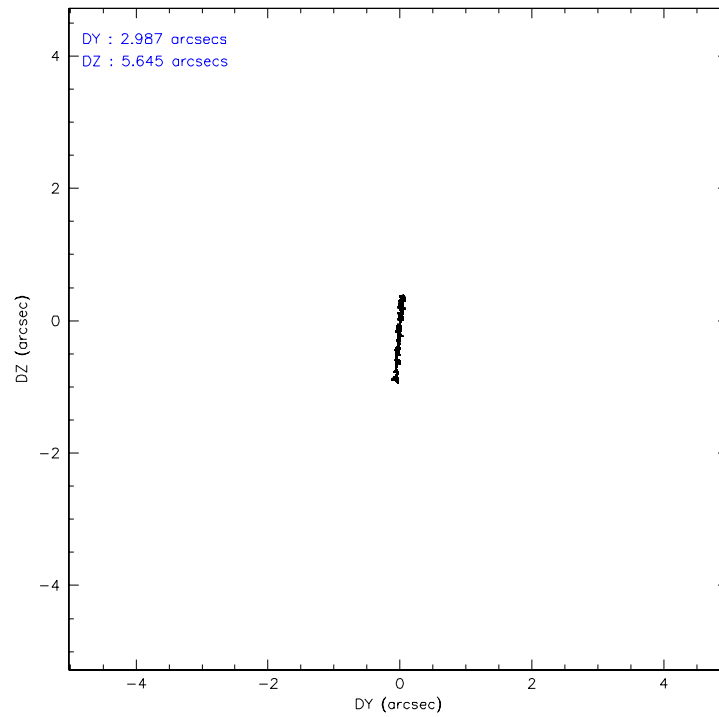
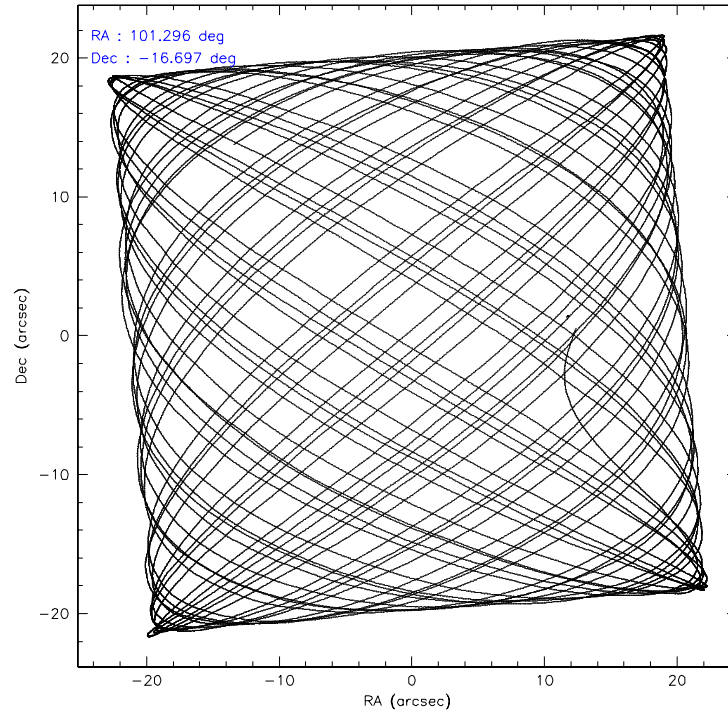
Level 1 Events

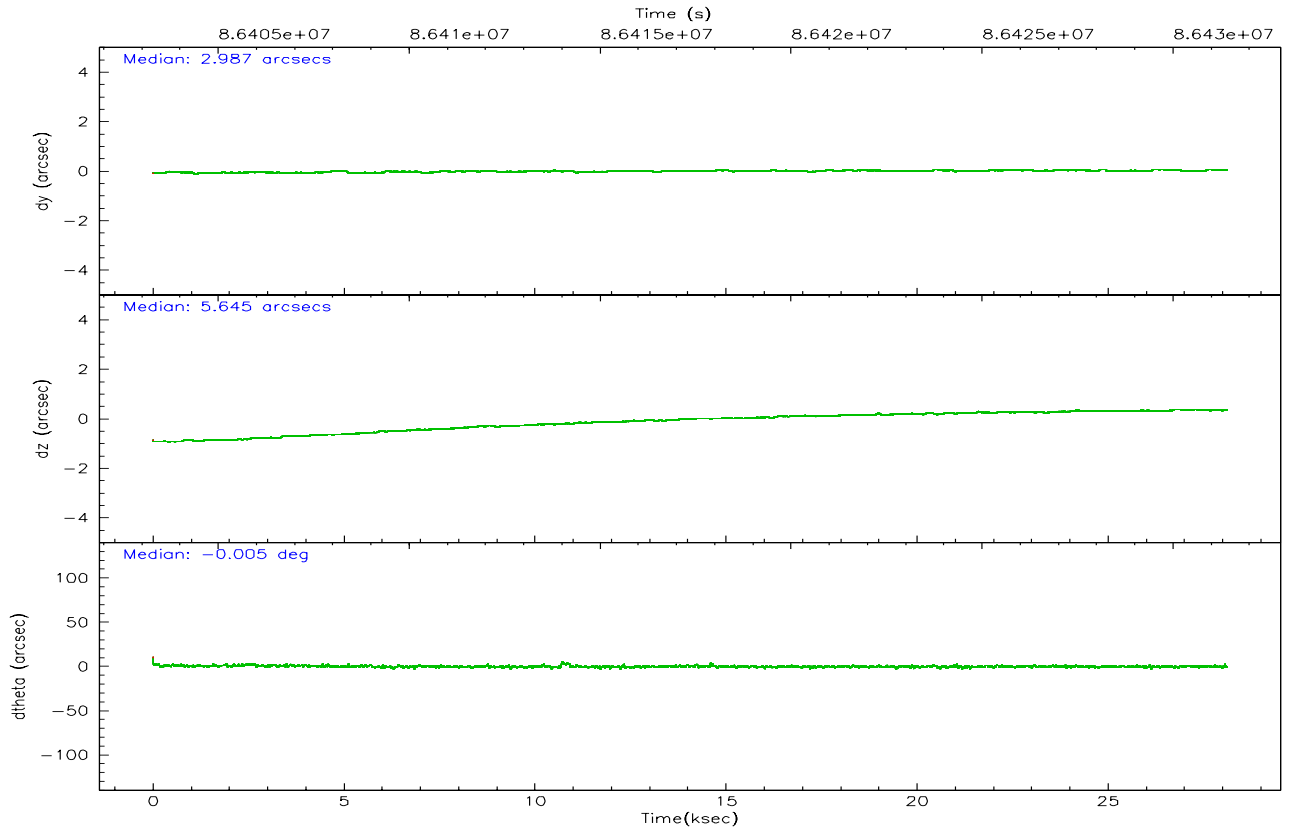
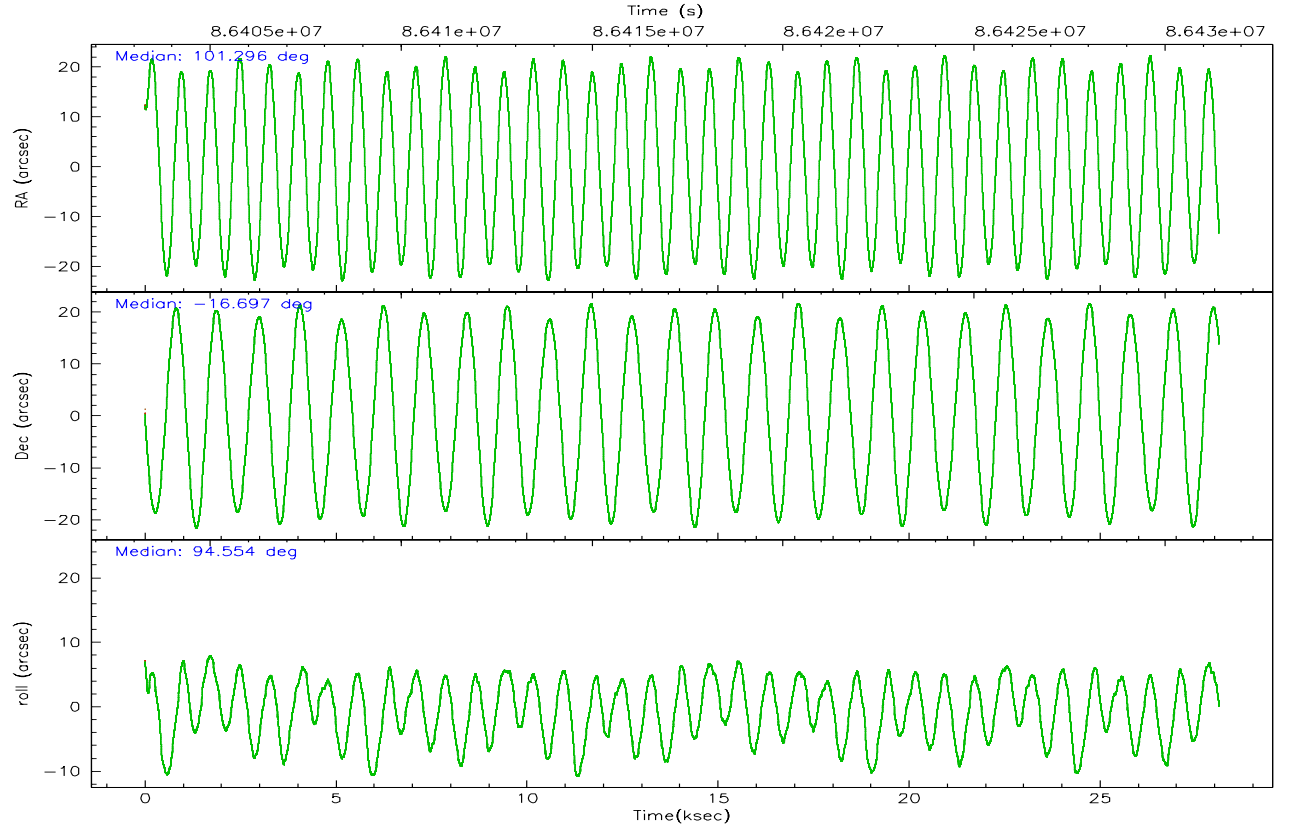
	segment 1	segment 2	segment 3
level 1 events	1328676	1179809	1168584
rejected events	175407	182410	228565
rejected %	13%	15%	19%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	HRC	HRC	Obspar format version number	6	6
Detector	HRC-S	HRC-S	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	OBSERVING	OBSERVING			
Observation mode	POINTING	POINTING			
Pointing RA	101.313728	101.2957065703174			
Pointing Dec	-16.719437	-16.69650179419627			
Pointing Roll	94.497232	94.55939011195055			
SIM focus pos (mm)	-1.429586	-1.428180813131781			
SIM defocus (mm)	0.1037507710433287	0.1051558262725154			
SIM translation stage pos (mm)	250.455976	250.466033080201			
SIM translation stage offset (mm)	0	-0.01005468664627074			
Observation start time	86403444.184000	86402129.91112199			
Observation start date	2000-09-27T00:56:20	2000-09-27T00:35:29			
Observation end time	86431416.184000	86432181.887255			
Observation end date	2000-09-27T08:42:32	2000-09-27T08:56:21			

2.3 Aspect



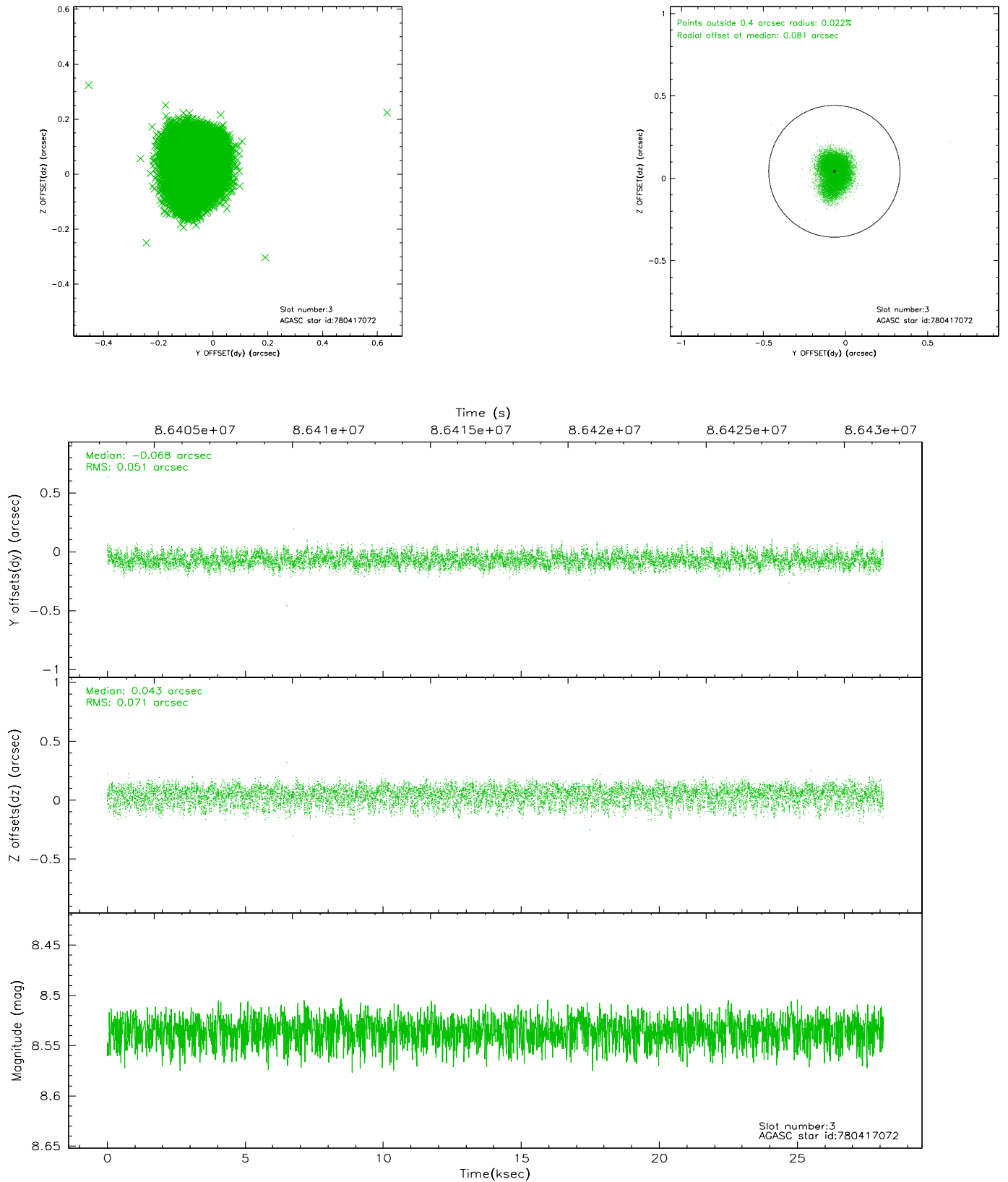


Slot Statistics

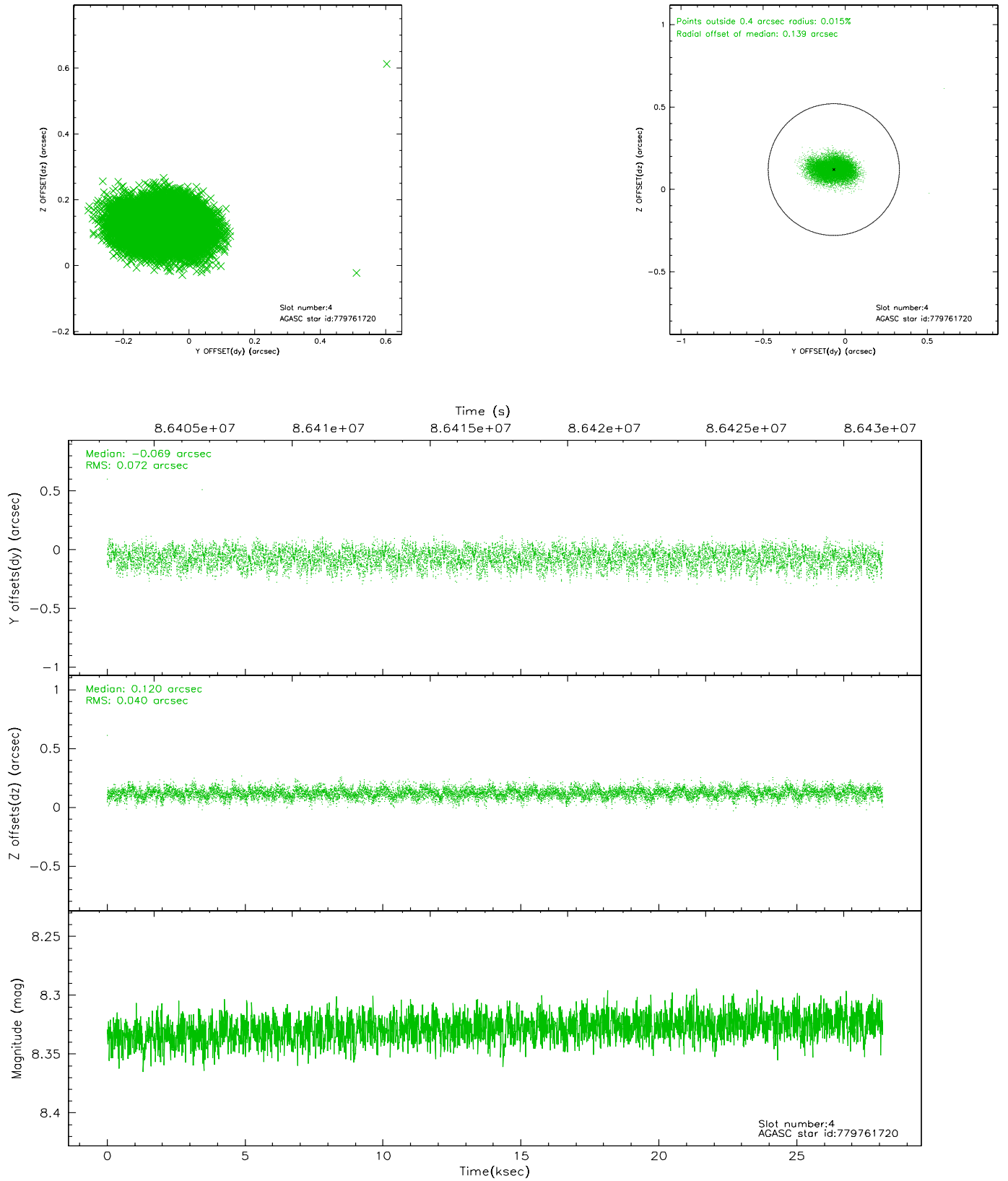
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	HRC-S-1	7.01	6860	0.131	-0.111	0.005	0.009	0.000000	0.000000	-1157.02	-454.04
1	FID	HRC-S-2	7.00	6860	0.115	-0.172	0.011	0.023	0.000000	0.000000	1242.48	-446.75
2	FID	HRC-S-4	6.97	6859	0.156	-0.020	0.010	0.022	0.000000	0.000000	1241.43	578.13
3	GUIDE	780417072	8.54	13717	-0.068	0.043	0.094	0.147	102.041439	-17.229692	-2031.60	-2349.99
4	GUIDE	779761720	8.33	13719	-0.069	0.120	0.087	0.142	101.810081	-16.066492	2207.04	-1895.49
5	GUIDE	780283312	8.67	13713	-0.013	0.022	0.089	0.139	101.569387	-16.934625	-841.28	-816.79
6	GUIDE	780284656	9.96	13709	0.059	-0.191	0.121	0.198	100.937496	-17.040854	-1053.01	1381.85
7	GUIDE	780272032	9.41	13706	0.088	0.014	0.083	0.137	101.484293	-17.270688	-2024.19	-428.64

2.4 Star Slots

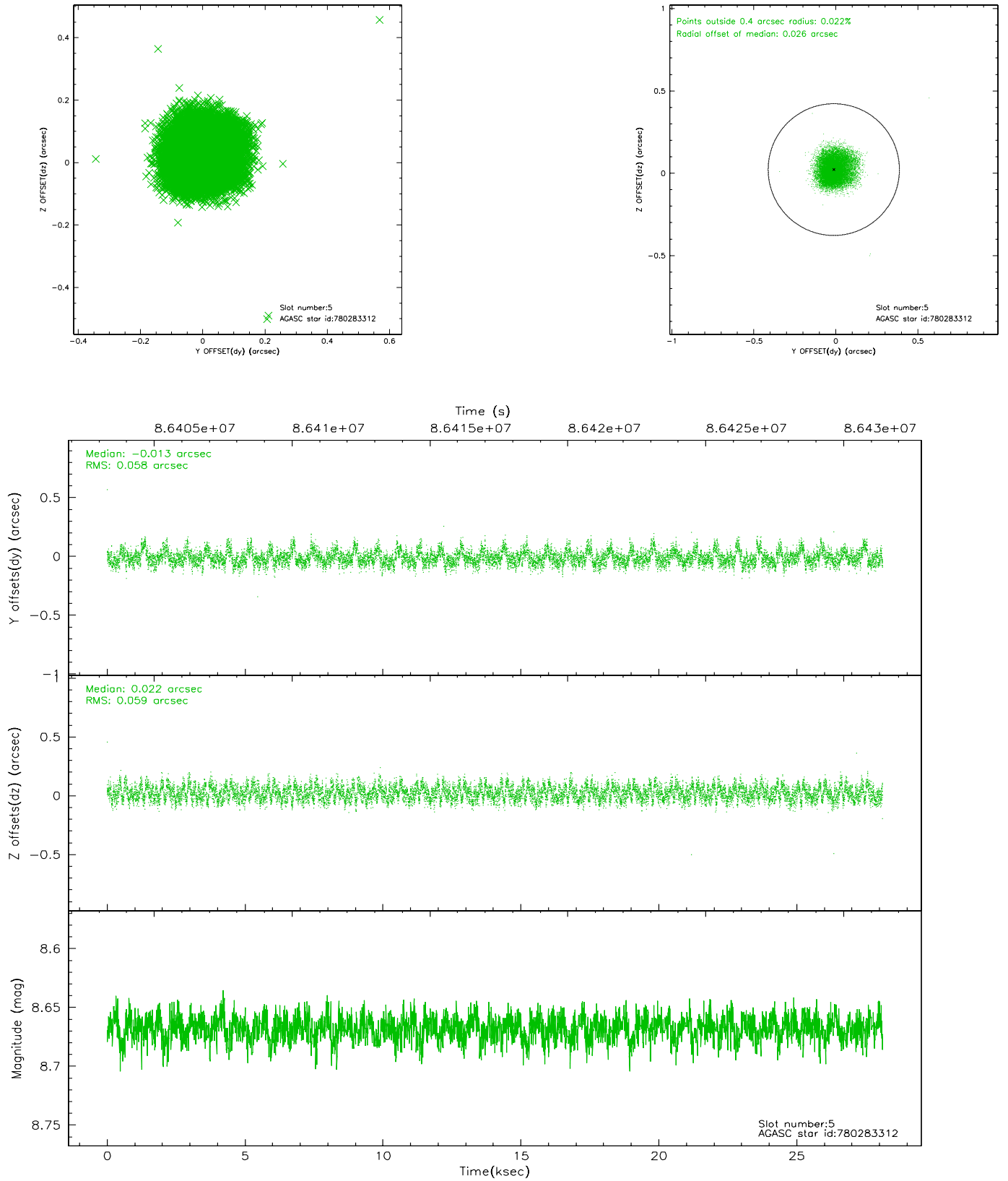
2.4.1 Slot 3



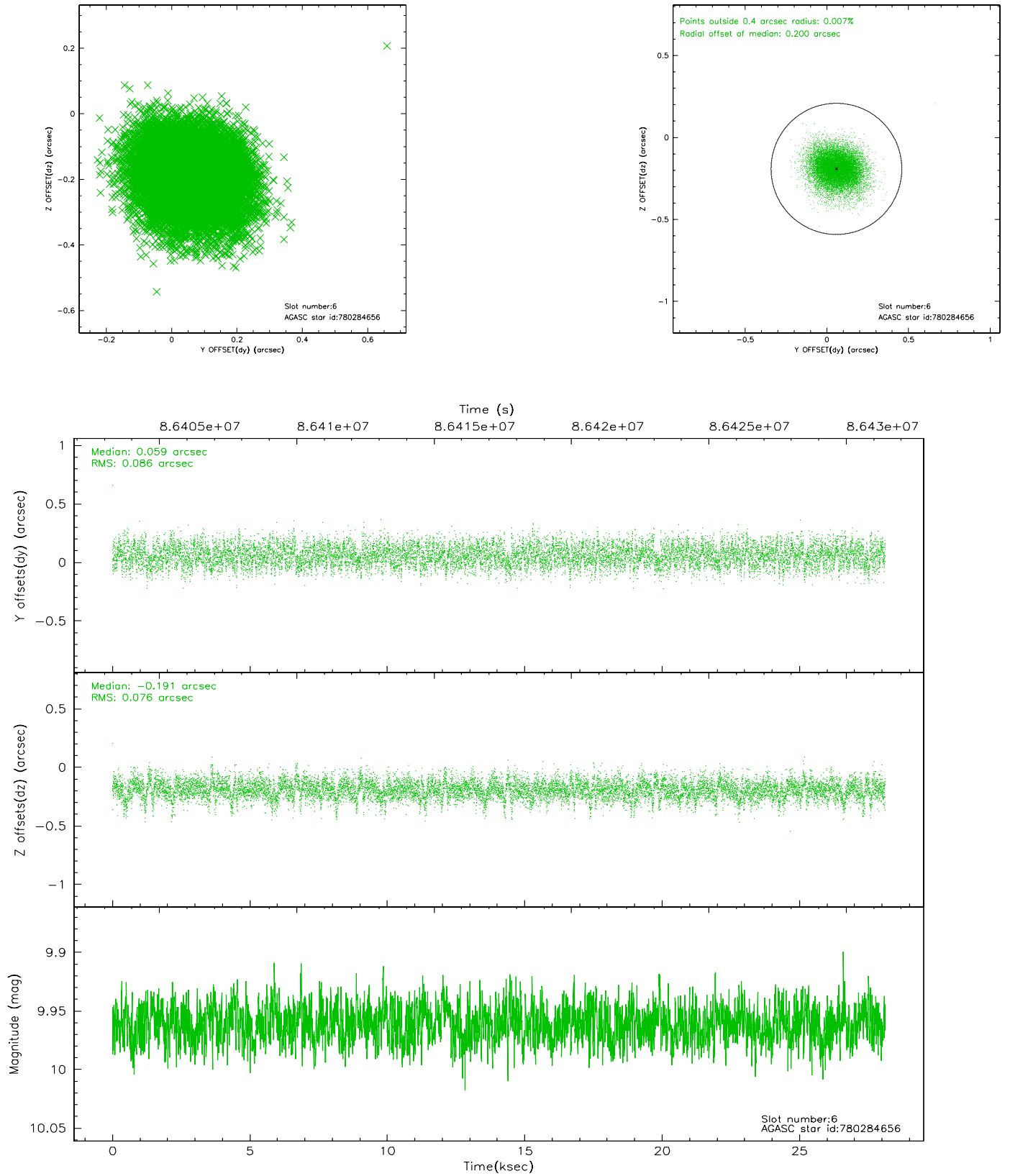
2.4.2 Slot 4



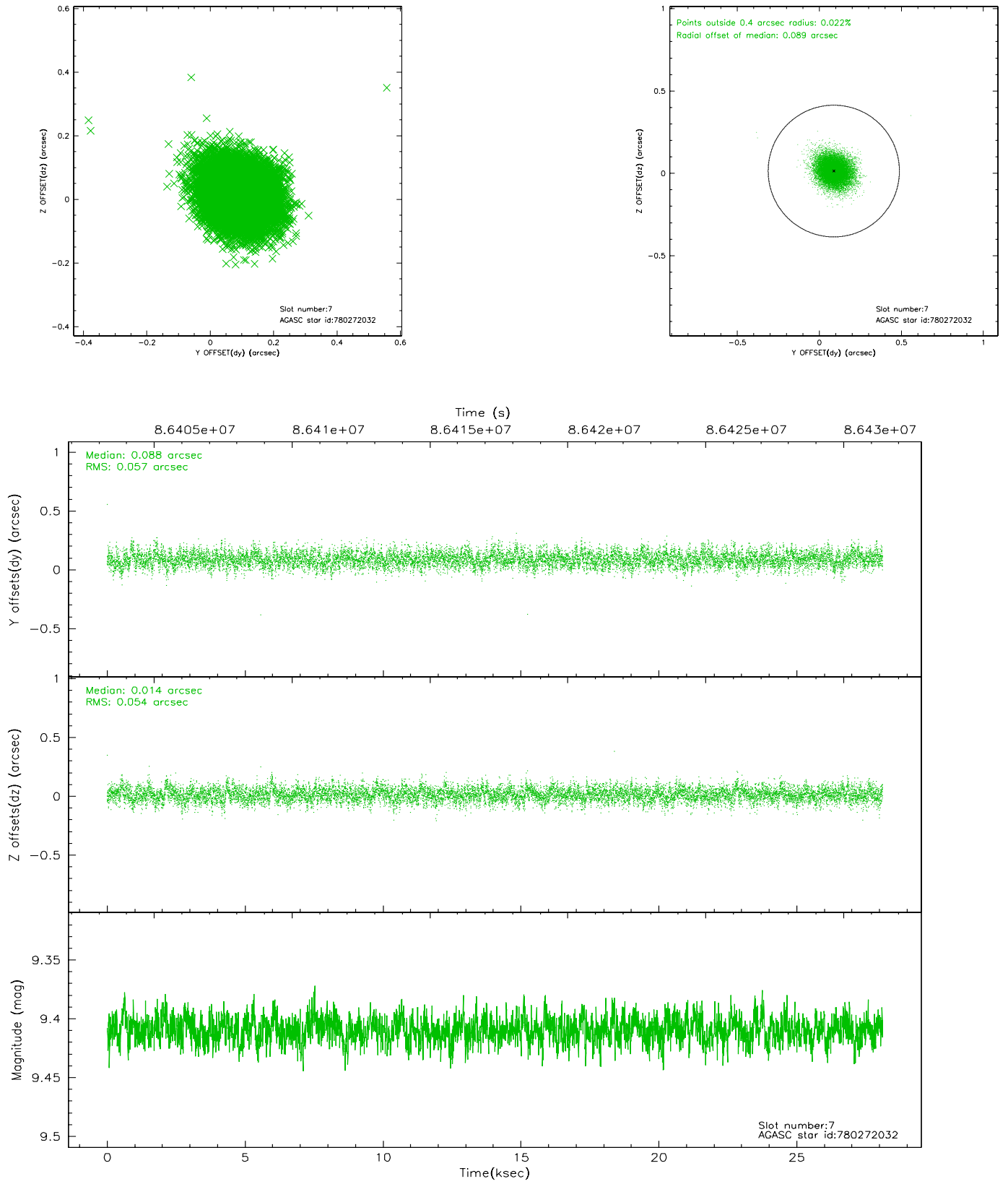
2.4.3 Slot 5



2.4.4 Slot 6

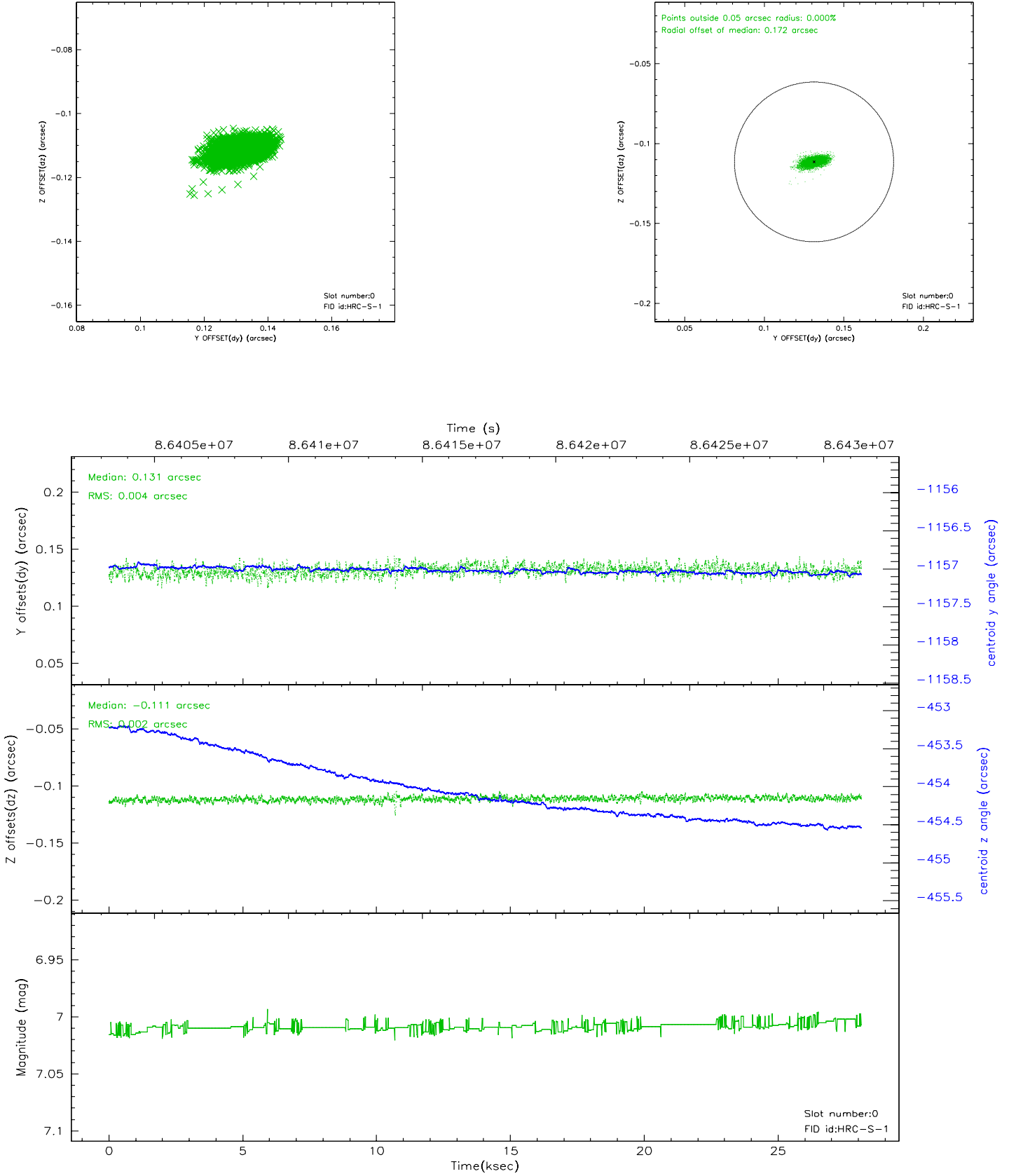


2.4.5 Slot 7

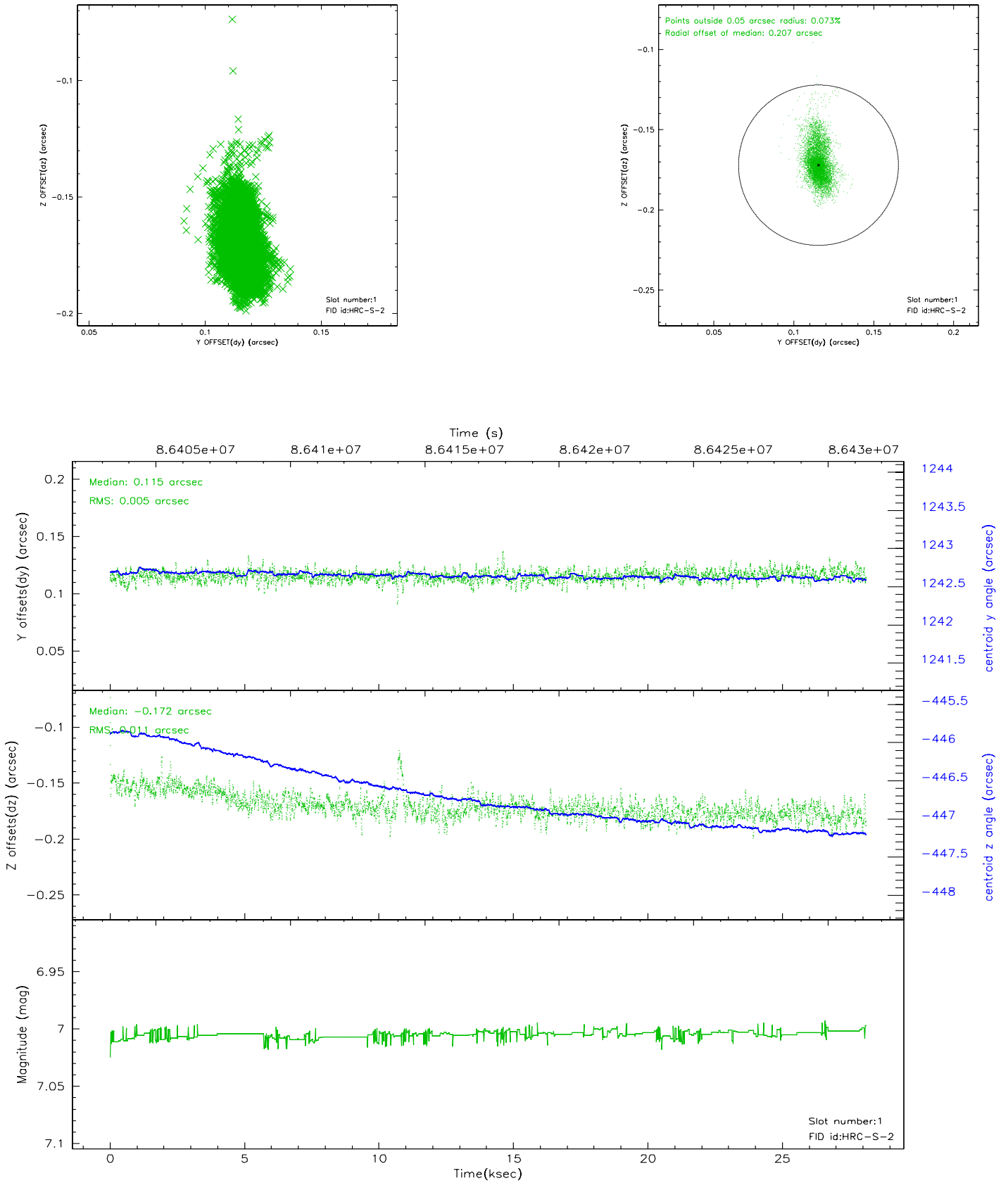


2.5 FID Slots

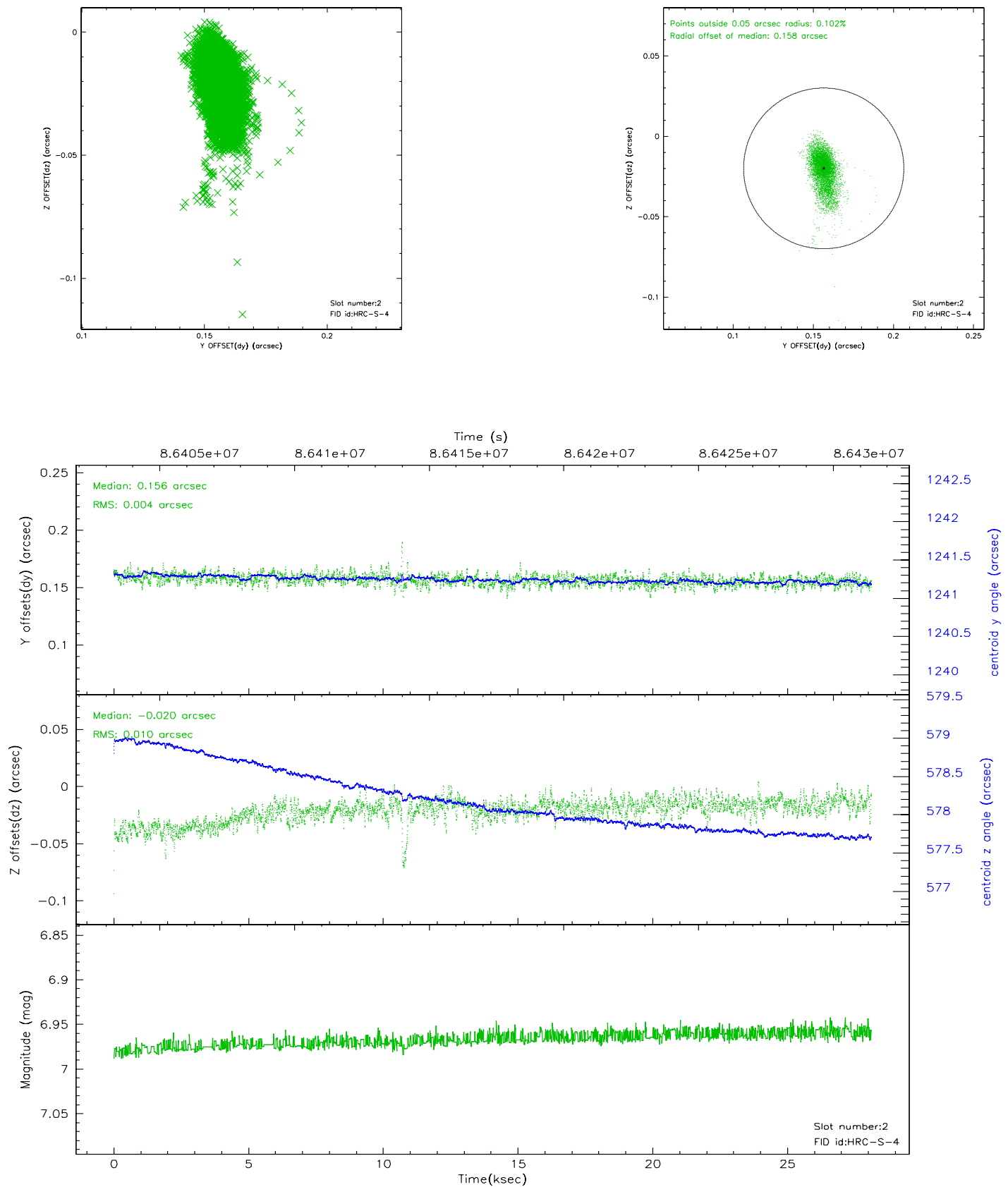
2.5.1 Slot 0



2.5.2 Slot 1

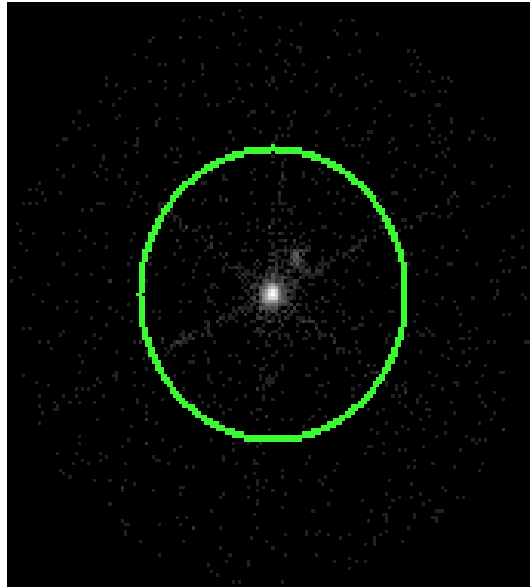


2.5.3 Slot 2



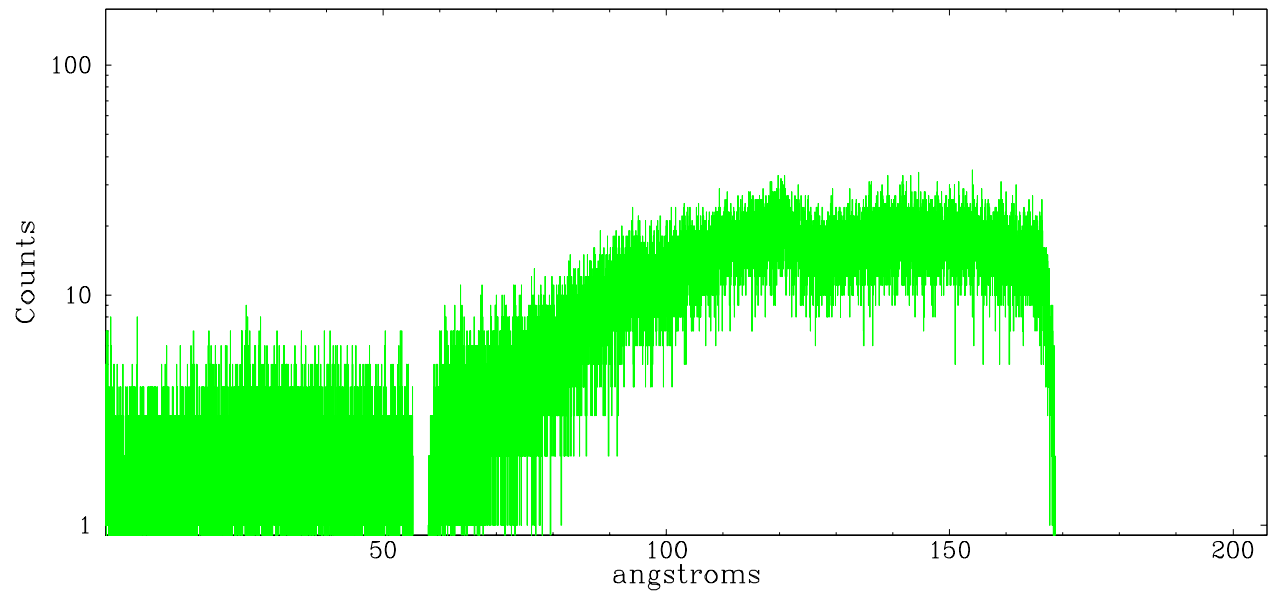
3 Gratings

3.1 LETG Arm

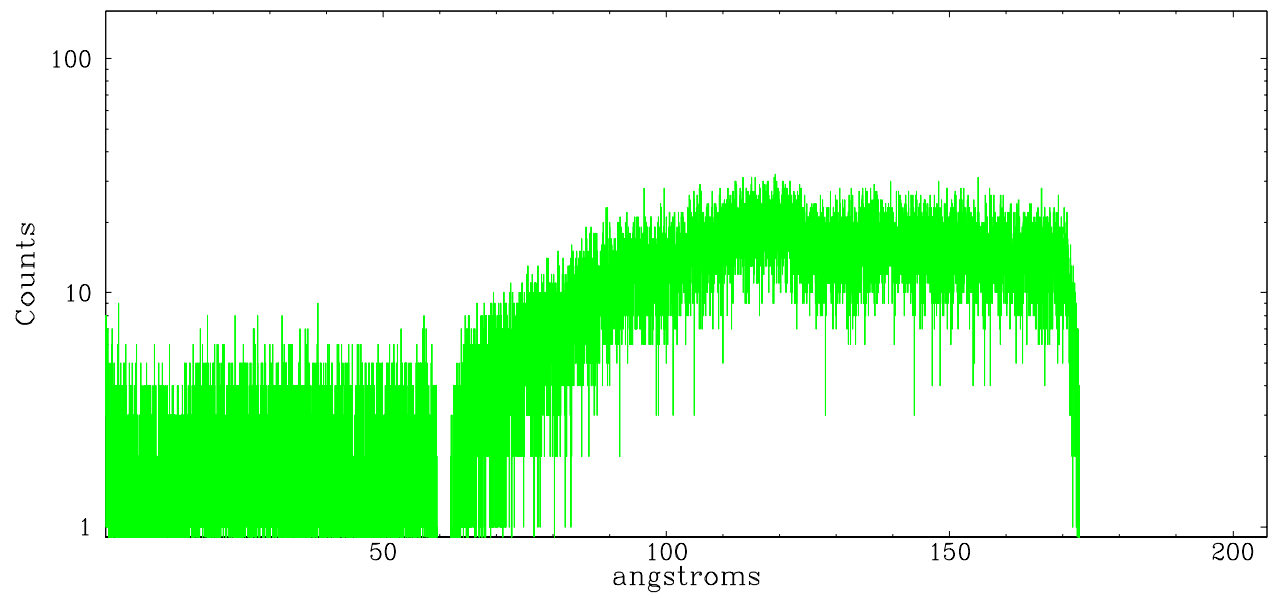


LETG Zero Order

leg order -1



leg order $+1$



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2007.09.07
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	27.946

A.2 Comments

This is the second obi of a multi-obi observation. The first obi, obi=0, was mistakenly observed without the fid lights turned on, so there are no Level 2 data for obi=0. This obi, obi=1, has been reprocessed as a single observation because there is no reason to try to combine the Level 2 products for obi=0 and obi=1.=====

Spectral extraction uses the position of Sirius A as the zeroth order, so the wavelengths are correct for Sirius A but slightly offset for Sirius B. The dispersed spectra of Sirius A and B overlap one another and would require custom extraction techniques to separate.=====

There are several periods during the observation when the DTF is less than 0.8 and the count rate is also anomalously high during those periods. A high radiation environment during the observations is believed to be the cause of the spikes in the count rate.